INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Multiple sheets used when necessary) SHEET 1 OF 2

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Application No.	10/645,331
Filing Date	August 21, 2003
First Named Inventor	Aydogan Ozcan
Art Unit	2877
Examiner	Sang H. Nguyen

STANF.131CP2

U.S. PATENT DOCUMENTS Pages, Columns, Lines Where Examiner **Document Number** Publication Date Name of Patentee or Applicant Relevant Passages or Relevant Figures Appear . 3,880,630 04/29/1975 Izawa 2 4,985,178 01/15/1991 Tam 3 5,086,239 02/04/1992 Wang 4 5,194,918 03/16/1993 Kino et al. 5 5,220,451 06/15/1993 Gotoh et al. 6 5,239,407 08/24/1993 Brueck et al. 7 09/21/1993 5,247,601 Myers et al. 8 Berkovic et al. 5,262,890 11/16/1993 9 5,368,782 11/29/1994 Gotoh et al. 05/30/1995 Tabata 10 5,420,717 11 5,434,699 07/18/1995 Berkovic et al. 12 5,523,840 06/06/1996 Nishizawa et al. 13 Field et al. 03/25/1997 5,615,041 14 6,043,884 03/28/2000 Curbelo Ozcan et al. (Atty. Docket No. 6,856,393 B2 02/15/2005 15 STANF.131CP1) 02/26/2004 Ozcan et al. (Atty. Docket No. 2004/0036880 A1 16 STANF.131A) GN 2004/0044714 A1 03/04/2004 Ozcan et al. (Atty. Docket No.

Attorney Docket No.

NON PATENT LITERATURE DOCUMENTS							
Examiner Initials Cite No. Include name of the author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.							
8N)	18	Fienup, J.R., "Reconstruction of an object from the modulus of its Fourier transform," Optics Letters, Vol. 3, No. 1, July 1978, pp. 27-29.					
SN/	19	Ozcan, A., et al., "A simple post-processing technique to improve the retrieval accuracy of second-order nonlinearity profiles," Edward L. Ginzton Laboratory: Stanford University, Stanford, California 94305; ©2004 Optical Society of America, 2 pages.					
COV	20	Ozcan, A., et al., "Cylinder-assisted Maker-fringe Technique," <u>Electronics Letters</u> , Vol. 39, No. 25, 11 th December 2003, 2 pages.					

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Examiner Signature	Sandwan	Date Considered	7/3	7/15	

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

T¹ - Place a check mark in this area when an English language Translation is attached.

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(Multiple sheets used when necessary)	Examiner	Sang H. Nguyen
SHEET 2 OF 2	Attorney Docket No.	STANF.131CP2

		NON PATENT LITERATURE DOCUMENTS	
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SN	21	Ozcan, A., et al., "Improved Fourier transform technique to determine second-order optical nonlinearity profiles," Edward L. Ginzton Laboratory: Stanford University, Stanford, California 94305; ©2003 Optical Society of America, 3 pages.	
	22	Ozcan, A., et al., "Improved technique to determine second-order optical nonlinearity profiles using two different samples," <u>Applied Physics Letters</u> , Vol. 84, No. 5, 2 February 2004, pp. 681-683.	•
	23,	Ozcan, A., et al., Erratum: "Inverse Fourier transform technique to determine second-order optical nonlinearity spatial profiles," <u>Applied Physics Letters</u> , Vol. 83, No. 8, 25 August 2003, p. 1679.	
	24	Ozcan, A., et al., "Post-processing of the second-order optical nonlinearity profile of thin films," Edward L. Ginzton Laboratory: Stanford University, Stanford, California 94305; ©2004 Optical Society of America, 2 pages.	
	25	Ozcan, A., et al., "Simplified inverse Fourier transform technique to determine second-order optical nonlinearity profiles using a reference sample," <u>Electronics Letters</u> , Vol. 40, No. 9, 29 th April 2004, 2 pages.	
26		Quatieri, Thomas F., Jr., et al., "Iterative techniques for minimum phase signal reconstruction from phase or magnitude," <u>IEEE Trans. Acoust. Speech, Signal Processing</u> , Vol. 29, 1981, pp. 1187-1193.	
8N	27	Rosenthal, Amir, et al., "Inverse Scattering Algorithm for Reconstructing Strongly Reflecting Fiber Bragg Gratings," <u>IEEE Journal of Quantum Electronics</u> , Vol. 39, No. 8, August 2003, pp. 1018-1026.	·

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U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
8N .	1	4,792,230	12/20/88	Naganuma et al.			
GN	2	5,530,544	06/25/96	Trebino et al.			
82	3	6,456,380 B1	09/24/02	Naganuma			

	FOREIGN PATENT DOCUMENTS							
EXAMINER		ER DOCUMENT NUMBER DATE COUNTRY		CLASS	SUBCLASS	TRANSLATION		
INITIAL							YES	NO
GN	4	JP 2000 329618 A	11/30/00	Japan				
(N)	5	JP 2001 083015 A	03/30/01	Japan				
(N)	6	PCT/US03/26311	08/21/03	PCT International Search Report dated 6/3/04				

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)			
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EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)							
SW.	1	Kashyap, Raman, et al., <i>Phase-matched second harmonic generation by periodic poling of fused silica</i> , <u>APPLIED PHYSICS LETTERS</u> , Vol. 64, No. 11, 14 March 1994, pp. 1332-1334.							
4W	2	Ozcan, A., et al., Inverse Fourier transform technique to determine second-order optical nonlinearity spatial profiles, APPLIED PHYSICS LETTERS, Vol. 82, No. 9, 3 March 2003, pp. 1362-1364.							
	3	"Invitation to Pay Additional Fees" from the International Searching Authority regarding corresponding PCT Application No. PCT/US 03/26311, filed August 21, 2003, including Annex to Form PCT/ISA/206, "Communication Relating to the Results of the Partial International Search."							
gw	4	Qui, Mingxin, et al., Erratum: "Double fitting of Marker fringes to characterize near-surface and bulk second-order nonlinearities in poled silica," APPLIED PHYSICS LETTERS, Vol. 77, No. 23, 4 December 2000, p. 3863.							

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(NEC 0 & 2003 LL) BY APPLICANT	APPLICANTS Aydogan Ozcan et al.			
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EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)		
.GN	Alley, Thomas G., et al., Space charge dynamics in thermally poled fused silica, Journal of Non-Crystall (1998), pp. 165-176.			
1	2	Bonfrate, G., et al., <i>Parametric fluorescence in periodically poled silica fibers</i> , Applied Physics Letters, Vol. 75, No. 16, October 18, 1999, pp. 2356-2358.		
	3	Faccio, D., et al., <i>Dynamics of the second-order nonlinearity in thermally poled silica glass,</i> Applied Physics Letters, Vol. 79, No. 17, October 22, 2001, pp. 2687-2689.		
	4	Fisher, Robert A., et al., <i>Transient analysis of Kerr-like phase conjugators using frequency-domain techniques</i> , PHYSICAL REVIEW A, Vol. 23, No. 6, June 1981, pp. 3071-3083.		
	5	Kazansky, P.G., et al., Thermally poled silica glass: Laser induced pressure pulse probe of charge distribution, Applied Physics Letters, Vol. 68, No. 2, January 8, 1996, pp. 269-271.		
	6	Liu, Alice C., et al., Advances in the measurement of the poled silica nonlinear profile, SPIE Vol. 3542, November 1998, pp. 115-119.		
	7	Maker, P.D., et al., Effects of Dispersion and Focusing on the Production of Optical Harmonics, Physical Review Letters, Vol. 8, No. 1, January 1, 1962, pp. 21-22.		
	8	Millane, R.P., Analytic Properties of the Hartley Transform and their Implications, PROCEEDINGS OF THE IEEE, Vol. 82, No. 3, March 1994, pp. 413-428.		
	9	Miller, D.A.B., <i>Time reversal of optical pulses by four-wave mixing,</i> OPTICS LETTERS, Vol. 5, No. 7, July 1980, pp. 300-302.		
	10	Myers, R.A., et al., Large second-order nonlinearity in poled fused silica, OPTICS LETTERS, Vol. 16, No. 22, November 15, 1991, pp. 1732-1734.		
	11	Nakajima, N., Reconstruction of a real function from its Hartley-transform intensity, J. Opt. Soc. Am. A., Vol. 5, No. 6, June 1988, pp. 858-863.		
	12	Pureur, D., et al., Absolute measurement of the second-order nonlinearity profile in poled silica, OPTICS LETTERS, Vol. 23, No. 8, April 15, 1998, pp. 588-590.		
	13	Qiu, Mingxin, et al., Double fitting of Maker fringes to characterize near-surface and bulk second-order nonlinearities in poled silica, Applied Physics Letters, Vol. 76, No. 23, June 5, 2000, pp. 3346-3348.		
	14	Quiquempois, Y., et al., Localisation of the induced second-order non-linearity within Infrasil and Suprasil thermally poled glasses, Optics Communications 176, April 1, 2000, pp. 479-487.		
	15	Sun, P.C., et al., Femtosecond pulse imaging: ultrafast optical oscilloscope, J. Opt. Soc. Am. A, Vol. 14, No. 5, May 1997, pp. 1159-1170.		
	16	Watanabe, Shigeki, et al., Compensation of Chromatic Dispersion in a Single-Mode Fiber by Optical Phase Conjugation, IEEE PHOTONICS TECHNOLOGY LETTERS, Vol. 5, No. 1, January 1993, pp. 92-95.		
·	17	Weiner, Andrew M., et al., Femtosecond Pulse Shaping for Synthesis, Processing, and Time-to-Space Conversion of Ultrafast Optical Waveforms, IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, Vol. 4, No. 2, March/April 1998, pp. 317-331.		
	18	Weiner, Andrew M., et al., Femtosecond Spectral Holography, IEEE JOURNAL OF QUANTUM ELECTRONICS, Vol. 28, No. 10, October 1992, pp. 2251-2256.		
4	19	Yariv, Amnon, et al., Compensation for channel dispersion by nonlinear optical phase conjugation, OPTICS LETTERS, Vol. 4, No. 2, February 1979, pp. 52-54.		
8W	20	Ferreira, Paulo Jorge S.G., Interpolation and the Discrete Papoulis-Gerchberg Algorithm, IEEE TRANSACTIONS ON SIGNAL PROCESSING, Vol. 42, No. 10, October 1994, pp. 2596-2606.		

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